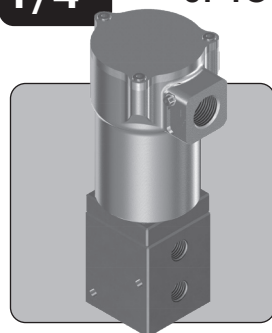


# -2/3DS01- DIRECT SOLENOID VALVE

1/4" UP TO 690 BAR 10,000 PSI



The 2/3DS01 is a 2 position 3 way direct acting stainless steel high pressure solenoid valve. The valve is configured normally closed and is an ideal choice for low flow, high pressure switching applications.

A wide variety of low wattage solenoid thrusters are available, including ATEX, IECEx and INMETRO approved coils for

use in hazardous areas and numerous electrical connections. Override and reset options provide additional functionality for systems where the ability for manual intervention is required.

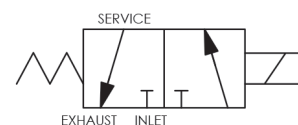
- 2 position 3 way direct acting solenoid valve
- Stainless steel construction
- Contamination tolerant with 40 micron filtration included as standard
- Efficient 3 watt coil design provides high force from low power
- Independently certified SIL 3 capability
- Coil may be rotated 360 to suit cable layout
- Wide variety of mounting, connection, voltage, override and reset options available
- Subsea versions available – contact us for advice

## Specifications

BASIC MODEL  
NUMBER

2/3DS01

SYMBOL



MAX WORKING  
PRESSURE LIQUID

690 bar  
(10,000 psi)

CV (FLOW CAPACITY)

0.01  
See performance graph

FLUID

Liquids only  
See materials section

TEMPERATURE RANGE

See Product Selector opposite  
and Technical Data section

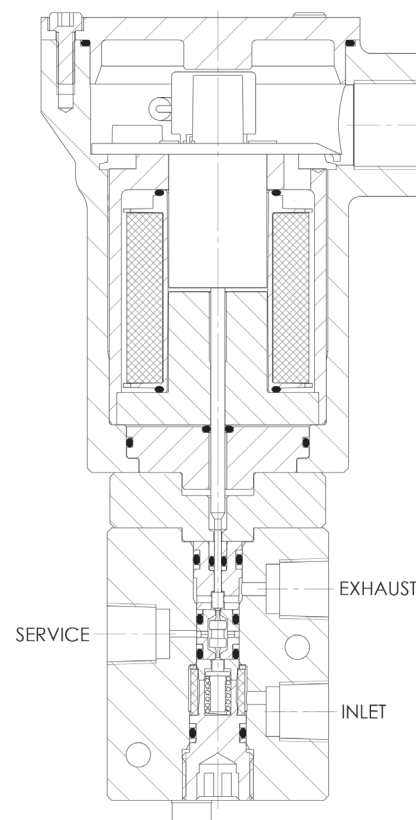
PORT SIZE

1/4"

WEIGHT

3.2 kg  
(7.1 lb)

Specifications may change without notice



## Materials

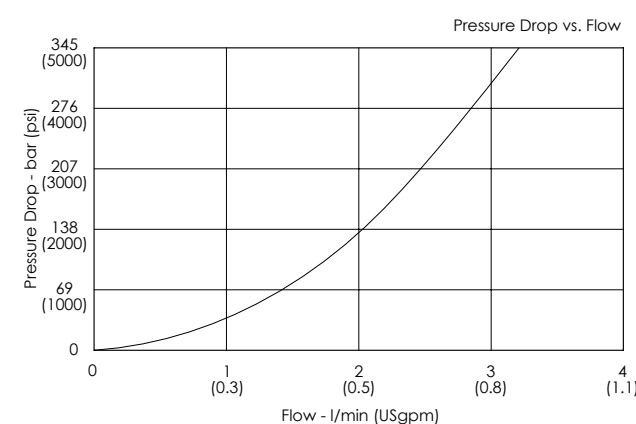
Externally Exposed Parts: 316, 17/4 PH and 300 series Stainless Steels. Acetal push button for manual override and reset options.

Internally Wetted Parts: 316, 302, 17/4 PH and MP35 Stainless Steel and Silicon Nitride.

The standard valve is designed for use with mineral oils, water glycols, plain water and may also be used with a wide variety of media compatible with the materials of construction.

⚠ The standard valve has Viton® seals. Further seal options are available via the Product Selector. Compatibility with the working fluid at the operating temperature must be considered.

## Typical Performance



Typical performance based on water

## Valve & Thruster Options

### Valve Options

As standard the valve will move to the energised position when a suitable electrical supply is applied and is returned by a spring (auto-reset) when the electrical supply is removed.

Alternative options include –

**MO : Manual Override** – With the electrical supply de-energised the valve may be temporarily switched via a push button. Releasing the push button will allow the valve to return. Contact us if a detented manual override feature is required.

**MR : Manual Reset** – Electrically energising the solenoid will not cause the valve to switch until the push button is pressed. Once the valve is switched the push button may be released and the valve will remain switched. Removing the electrical supply will cause the valve to return to the de-energised position. The valve will not switch if the push button is pressed with the coil de-energised.

**MOMR : Manual Override and Manual Reset** – Electrically energising the solenoid will not cause the valve to switch until the push button is pressed. Once the valve is switched the push button may be released and the valve will remain switched. Removing the electrical supply will cause the valve to return to the de-energised position. The valve will switch if the push button is pressed with the coil de-energised.

Please contact us for further override, reset and latching options.

### Thruster & Seal Options

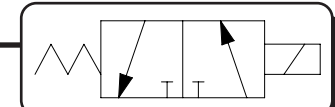
For use in zone 1 and 2 explosive atmospheres as defined by 1999/92/EC either the STExd or STExm thruster must be selected. It is the customer's responsibility to assess the application and to determine the zone and temperature class for their particular atmosphere. Please contact us if use in zone 0 is required.

The temperatures stated for seal options relate to the temperature of the fluid inside the valve. Maximum fluid temperature should be limited to the allowable ATEX surface temperature. The minimum allowable ambient temperature is equal to the minimum allowable seal temperature. The table below details the maximum allowable ambient temperature limits. All coils use class H insulation.

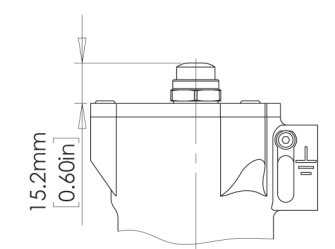
The thruster options included on this data sheet represent only a few common configurations. Please contact us where alternative options are required, such as dual coil windings, alternative electrical supplies, connections and conduits or when subsea use is required.

Thruster Type	Maximum Ambient Temperature for non-hazardous area	Maximum Ambient Temperature for T4 temperature rating	Maximum Ambient Temperature for T6 temperature rating	IP Rating
STHC	90°C	Not allowed	Not allowed	65
STKC	90°C	Not allowed	Not allowed	68
STExd	90°C	90°C*	65°C	68
STExm	90°C	80°C*	Not allowed	68

Voltage Option	Voltage Range
12VDC	10.8 – 13.2V
24VDC	21.6 – 26.4V
48VDC	43.2 – 52.8V
115VAC	100.0 – 127.0V 50/60Hz
230VAC	215.0 – 253.0V 50/60Hz



ADDITIONAL HEIGHT FOR MO, MR AND MOMR VARIANTS



## Product Selector

2/3DS01 /25P - MO - STHC - 12VDC - NBR - 10K

VALVE TYPE	PORTING OPTIONS	VALVE OPTIONS	THRUSTER OPTIONS	VOLTAGE OPTIONS	SEAL OPTIONS	MAX WORKING PRESSURE
2/3DS01	/25P 1/4" BSPF female /25N 1/4" NPT female -44AE 1/4" OD medium pressure tube port M Manifold mount	Leave blank if none required MO Manual override MR Manual reset MOMR Manual override and manual reset	STHC Din connector STKC M20 conduit STExd Ex db approved STExm Ex emb approved STIM INMETRO Ex db approved	12VDC 12 volt DC 24VDC 24 volt DC 48VDC 48 volt DC 115VAC 110/120 volt AC 230VAC 230/240 volt AC (contact BIS for power requirements of 230VAC option) STExm thruster is not available with AC coils Further voltage options are available on request	Leave blank for Viton® seals -10°C to +120°C NBR Nitrile seals -25°C to +105°C EP EPDM seals -45°C to +120°C HNBR Hydrogenated Nitrile seals -20°C to +120°C Further seal options are available on request. Temperature ratings relate to fluid temperature. See above for ambient temperatures	10K 690 bar (10,000 psi) Liquid



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[www.bisvalves.co.uk](http://www.bisvalves.co.uk)



VALVES  
The Specifier's Catalogue

Page ???

SOLENOID

STOP  
AND  
METERING

3 PORT  
DIRECTIONAL  
CONTROL

4 PORT  
DIRECTIONAL  
CONTROL

CHECK  
AND  
SHUTTLE

PILOT  
OPERATED  
CHECK

RELIEF

EXCESS  
FLOW

FILTERS

PRESSURE  
SENSING

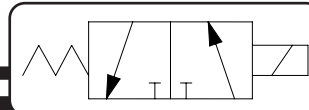
PUMPS

ACTUATORS

TECHNICAL  
DATA

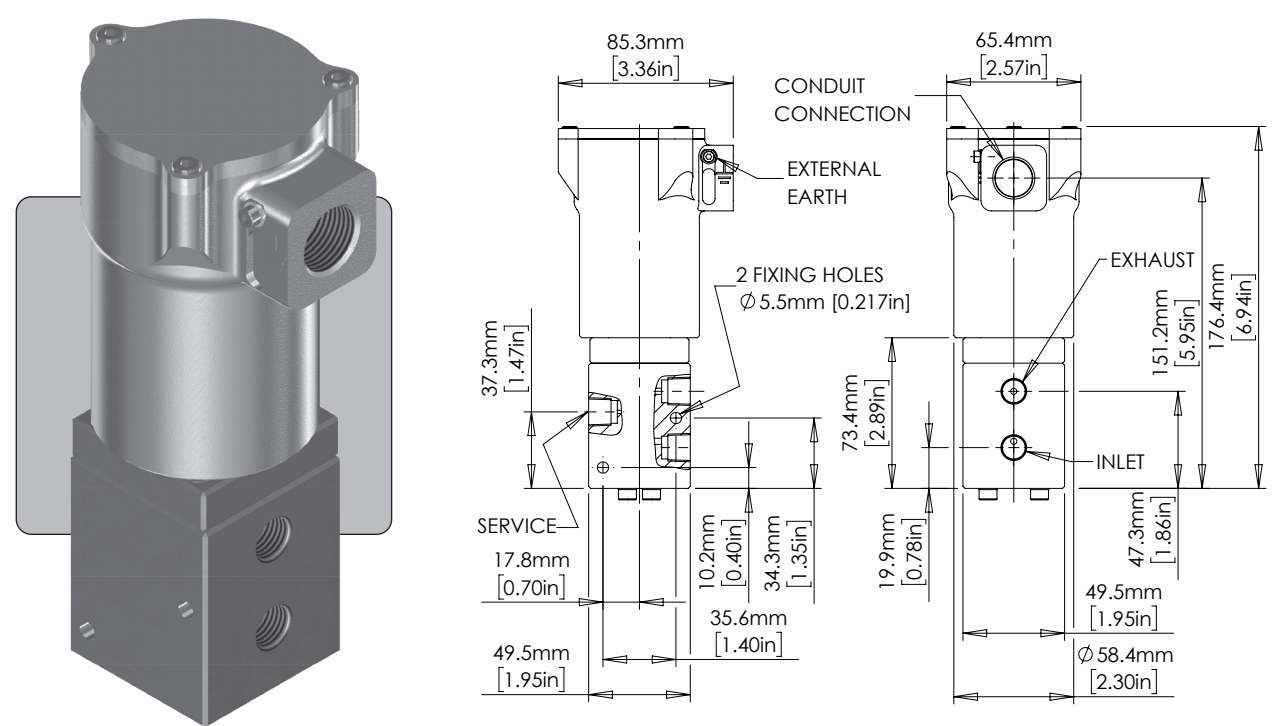
# 2/3DS01

## DIRECT SOLENOID VALVE

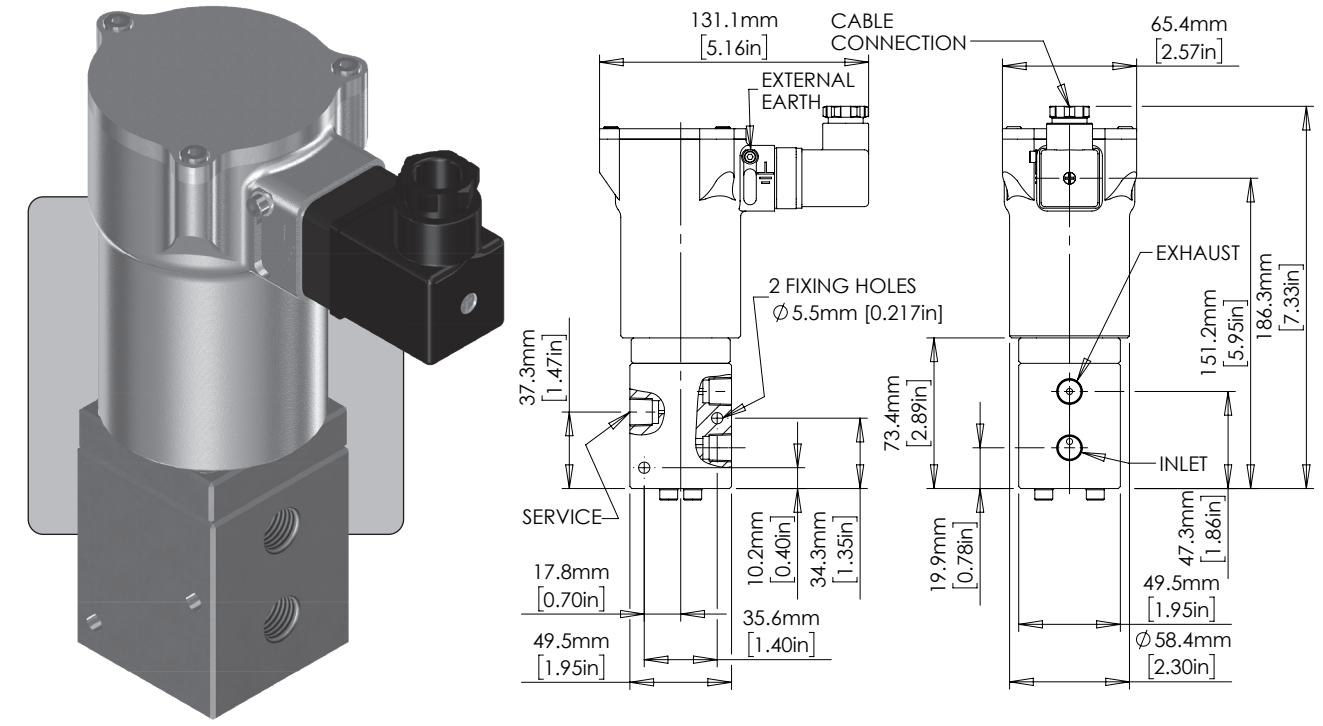


SOLENOID

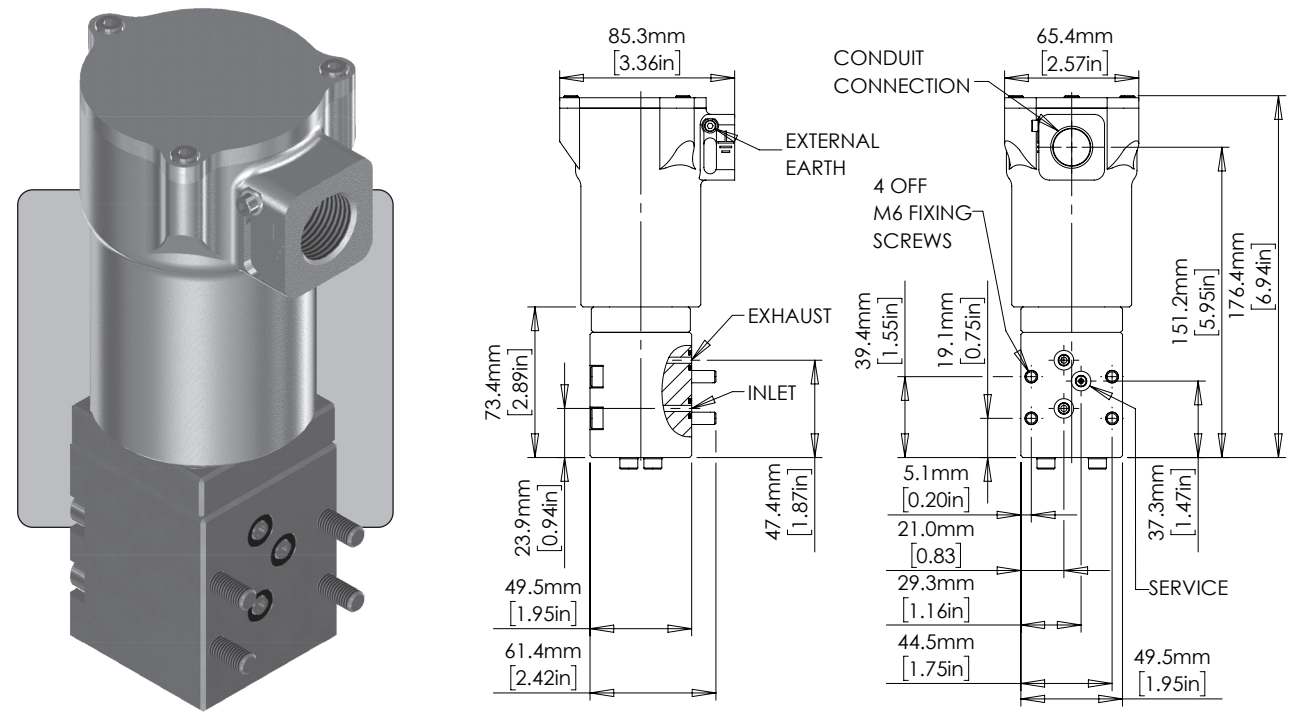
### 2/3DS01/25P or /25N-STEXd or STEXm



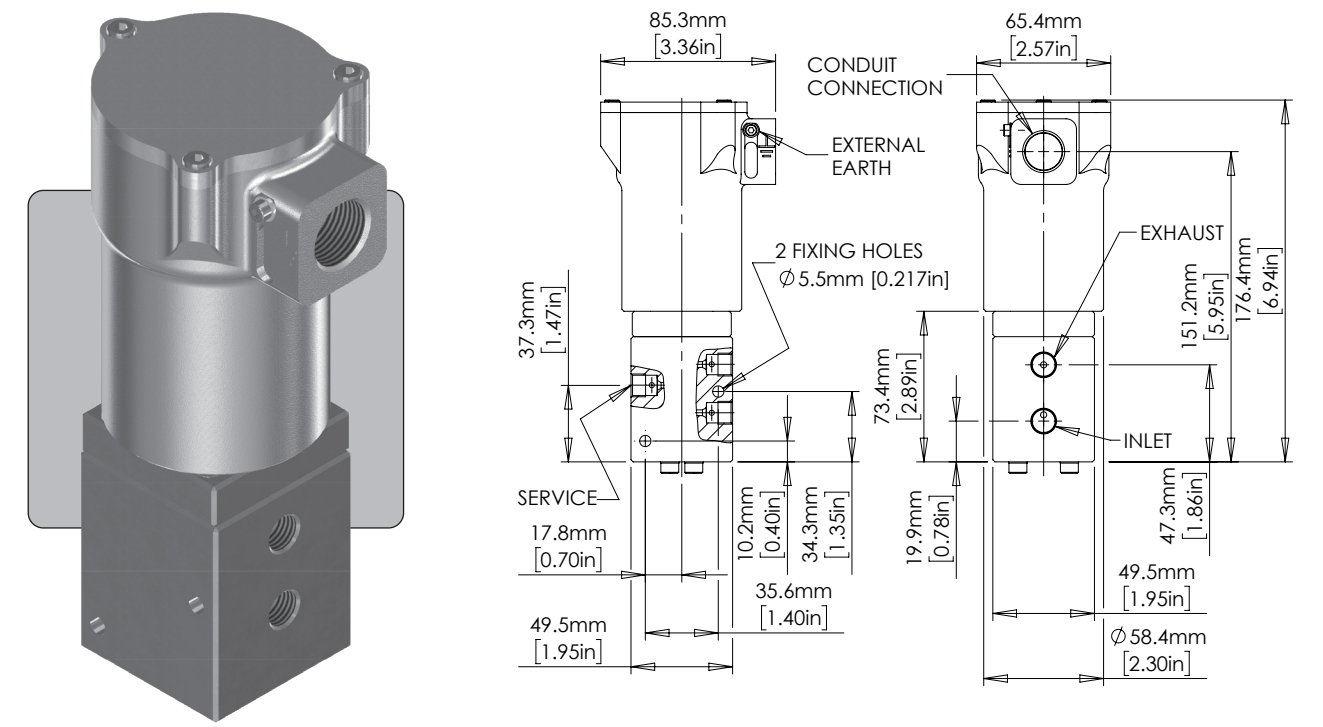
### 2/3DS01/25P or /25N-STHC



### 2/3DS01M-STEXd or STEXm



### 2/3DS01-44AE-STEXd or STEXm



STOP AND METERING

3 PORT DIRECTIONAL CONTROL

4 PORT DIRECTIONAL CONTROL

CHECK AND SHUTTLE

PILOT OPERATED CHECK

RELIEF

EXCESS FLOW

FILTERS

PRESSURE SENSING

PUMPS

ACTUATORS

TECHNICAL DATA

